

REMARKS

Reconsideration of this application as amended is respectfully requested.

Claims 1-27 stand rejected under 35 U.S.C. §112, second paragraph.

Claims 1-9, 14-16, and 21-23 stand rejected under 35 U.S.C. §103(a) as being obvious under U.S. Patent No. 6,026,086 of Lancelot et al (Lancelot) in view of U.S. Patent No. 6,041,058 of Flanders et al (Flanders).

Claims 1- 27 have been rejected under 35 U.S.C. §112, second paragraph. The Examiner has stated that the word "type" renders the claims indefinite. Independent claims 1, 7, 14, and 21 have been amended by replacing the word "type" with the word "category" in order to overcome the rejection. This word change moves the claim away from exemplary language and renders the claim more definite.

The Examiner has rejected claims 1-9, 14-16, and 21-23 under 35 U.S.C. §103(a) as being unpatentable over Lancelot in view of Flanders. The Examiner has stated that

Lancelot et al teaches in fig 2, the primary station 105 receiving connection requests from secondary station 110. The connection request includes the particular network protocol in which the primary station 105 uses to convert the first network protocol to a suitable second network protocol (see col. 9, lines 44-65). The primary station includes the communication controller 145 which selectively executes codes stored in the associated memory for protocol conversion (see col. 4, lines 33-45 also see fig 6 which discloses the interworking function).

Lancelot et al fails to explicitly teach the selectively enable on-board components. However, Flanders et al teaches a bridge/router comprising a motherboard and plurality of hardware network interface modules in figs 1 & 2. Flanders teaches that hardware analysis and filtering by logic circuits operating at wire speed improves network performance compared with processor intensive software analysis (see col. 1, lines 48-63). One of ordinary skilled would have been motivated by Flanders teaching to provide network protocol conversion in hardware to improve network

performance. The protocol dependent network interface module of Flanders can be combined with interworking function within primary station of Lancelot et al to selectively activate the particular network interface module. Therefore, it would have been obvious to one ordinary skilled to incorporate the teaching of Flanders et al into the teaching of Lancelot et al for network performance.

(pp. 2-3 Office Action 8/29/01).

Applicants respectfully submit, however that claims 1-9, 14-16, and 21-23 are not obvious under 35 U.S.C. §103(a) by Lancelot in view of Flanders. Claims 1-9, 14-16, and 21-23 include the limitations

executing code to selectively enable on-board components to process data over the network connection, according to the network traffic category.

(Claim 1)(Emphasis added).

a plurality of network on-board components residing on a single platform, the plurality of network on-board components to process data according to the network traffic category; and

a processor coupled to the plurality of network on-board components, the processor executing a predetermined one of a plurality of software modules corresponding to the category of network traffic arriving on the network connection and to selectively enable at least one of the plurality of network on-board components according to the predetermined one of a plurality of software modules

(Claim 7).

a plurality of network on-board components residing on a single platform, the plurality of network on-board components to process data according to the network traffic category; and

a processor coupled to the plurality of network on-board components and configured to execute a predetermined one of a plurality of software modules corresponding to the category of network traffic arriving on the network connection and to selectively enable at least one of the plurality of network

on-board components according to the predetermined one of a plurality of software modules .

(Claim 14).

means for executing code for a predetermined one of a plurality of software modules corresponding to the category of network traffic arriving on the network connection and to selectively enable at least one of the plurality of means for processing data according to the predetermined one of a plurality of software modules, the means for executing coupled to the plurality of means for processing.

(Claim 21).

According to the Examiner, Lancelot fails to teach selectively enabling on-board components. Additionally, applicants would submit that Flanders does not disclose selectively enabling at least one of the plurality of means for processing data according to the predetermined one of a plurality of software images. Flanders discloses that

Hardware analysis and filtering by logic circuits operating at wire speed improves network performance. Software based analysis and filtering techniques are often capable of handling a wide variety of data units types. However, such software based techniques are cumbersome and processor intensive. The present invention employs high speed logic circuits to analyze and filter a subset of data unit types, typically the data unit types most commonly handled by the bridge/router, and employs flexible software based techniques for those data units that cannot be handled by the logic circuits. Hence, the flexibility of the software based techniques is retained while reducing analysis and filtering time for at least a portion of data unit traffic. Further, multiple filters can be simultaneously applied for those data units that are handled by the logic circuits.

(Flanders Col. 1, lines 48-62).

In other words, Flanders uses high-speed logic circuits to analyze and filter a subset of data unit types. Flanders does not teach selectively enabling on-board components to process data. In contrast, claim 1 refers to executing code to selectively enable on-board components to process data over the network

connection, according to the network traffic category. Given that claims 2-6 depend from claim 1, claims 8-13 depend from claim 7, claims 15-20 depend from claim 14, and claims 22-27 depend from claim 21, applicants submit that claims 2-6, 8-13, 15-20, and 22-27 are not anticipated under 35 U.S.C. §102 by the reference cited by the Examiner, for at least these reasons.

It is submitted Lancelot does not teach or suggest a combination with Flanders, nor does Flanders teach or suggest a combination with Lancelot. It is further submitted that combining Lancelot with Flanders is impermissible hindsight based on applicant's own disclosure. Even if Lancelot and Flanders were combined, the combination would still lack the element of a processor coupled to the plurality of network on-board components, the processor executing a predetermined one of a plurality of software images corresponding to the type of network traffic arriving on the network connection and to selectively enable at least one of the plurality of network on-board components according to the predetermined one of a plurality of software images. Therefore, claims 1-27 are not obvious under 35 U.S.C. §103 by the references cited by the Examiner, for at least these reasons.

Applicants therefore submit that the rejections and objections have been overcome. If the Examiner believes a telephone conference would expedite or assist in the allowance of the present application, the Examiner is invited to call Stephen Neal at (408) 720-8300.

If any fee is due not covered by any check submitted please charge Deposit
Account No. 02-2666.

Respectfully submitted,

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MARKED-UP VERSION TO SHOW CHANGES MADE

IN THE CLAIMS:

1. (Twice Amended) A method for a single hardware platform to support multiple network traffic categories [types], comprising:
 - detecting a request to establish a network connection to the hardware platform;
 - determining network traffic category [type] used by the network connection;
 - and
 - executing code to selectively enable on-board components to process data over the network connection, according to the network traffic category [type].
2. (Twice Amended) The method of claim 1 further comprising invoking an appropriate one of a plurality of software modules corresponding to the network traffic category [type].
4. (Amended) The method of claim 2 wherein one of the plurality of network traffic category [type] being voice data.
5. (Amended) The method of claim 2 wherein one of the plurality of network traffic category [type] being Asynchronous Transfer Mode (ATM).
6. (Amended) The method of claim 2 wherein one of the plurality of network traffic category [type] being Frame Relay.

7. (Twice Amended) An apparatus for a multi-service network architecture for processing network traffic arriving on a network connection comprising:

a plurality of network on-board components residing on a single platform, the plurality of network on-board components to process data according to the network traffic category; and

a processor coupled to the plurality of network on-board components, the processor executing a predetermined one of a plurality of software modules corresponding to the category [type] of network traffic arriving on the network connection and to selectively enable at least one of the plurality of network on-board components according to the predetermined one of a plurality of software modules.

13. (Twice Amended) The apparatus of claim 11 further comprising a connection management software coupled to the local memory, the connection management software identifying the category [type] of connection set-up being requested and to invoke a corresponding one of a plurality of software modules which programs the TDM switch to correctly manage desired connectivity.

14. (Twice Amended) A system for a multi-service network architecture for processing network traffic arriving on a network connection comprising:

a plurality of network on-board components residing on a single platform, the plurality of network on-board components to process data according to the network traffic category; and

a processor coupled to the plurality of network on-board components and configured to execute a predetermined one of a plurality of software modules

corresponding to the category [type] of network traffic arriving on the network connection and to selectively enable at least one of the plurality of network on-board components according to the predetermined one of a plurality of software modules .

20. (Twice Amended) The system of claim 19 further comprising a connection management software coupled to the local memory and configured to identify the category [type] of connection set-up being requested and to invoke a corresponding one of a plurality of software modules which programs the TDM switch to correctly manage desired connectivity.

21. (Twice Amended) An apparatus for a multi-service network architecture for processing network traffic arriving on a network connection comprising:

a plurality of means for processing data for a predetermined network traffic category [type] residing on a single platform; and

means for executing code for a predetermined one of a plurality of software modules corresponding to the category [type] of network traffic arriving on the network connection and to selectively enable at least one of the plurality of means for processing data according to the predetermined one of a plurality of software modules, the means for executing coupled to the plurality of means for processing.

27. (Twice Amended) The apparatus of claim 26 further comprising means for identifying the category [type] of connection set-up being requested at the network connection and to invoke a corresponding one of a plurality of software modules which programs the TDM switch to correctly manage desired connectivity, the means for identifying coupled to the means for storing.